Caladenia chlorostyla

SYNONYMS

Petalochilus chlorostylus (D.L.Jones, Molloy et M.A.Clem.) D.L.Jones et M.A.Clem.; Petalochilus calyciformis R.S.Rogers, Petalochilus saccatus R.S.Rogers,

FAMILY

Orchidaceae

AUTHORITY

Caladenia chlorostyla D.L.Jones, Molloy et M.A.Clem.

FLORA CATEGORY

Vascular - Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

Nο

ENDEMIC FAMILY

Nο

STRUCTURAL CLASS

Orchids

NVS CODE

PETCHL

CHROMOSOME NUMBER

2n = 39, 40, 41

CURRENT CONSERVATION STATUS

2017 | Not Threatened

PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened

2009 | Not Threatened

2004 | Not Threatened

DISTRIBUTION

Probably Endemic. New Zealand: Manawatāwhi / Three Kings Islands, North Island, South Island, Stewart Island/Rakiura, Chatham Islands, Auckland Islands.

HABITAT

Coastal to montane up to 1000 m a.s.l.) in well-lighted situations in scrub, successional and mature tall indigenous forest. Also frequent in plantation forests.





Remutaka Forest Park. Photographer: Jeremy R. Rolfe, Date taken: 25/11/2006, Licence: CC BY.



Remutaka Forest Park. Photographer: Jeremy R. Rolfe, Date taken: 25/11/2006, Licence: CC

DETAILED DESCRIPTION

Solitary, hirsute, terrestrial, tuberous herb. **Leaf** semi-erect, 50–150 × 1–3 mm, bright green, narrowly linear, sparsely glandular pubescent. Flowering scape, slender, wiry, 10-300 mm tall, green, glandular-pubescent. Sterile bracts spreading widely, 6.0-11.0 × 1.0-2.5 mm, narrowly ovate-lanceolate, acuminate, externally glandularpubescent; fertile bracts closely sheathing, 3-8 × 2-3 mm, narrowly ovate-lanceolate, externally glandular pubescent. Ovary, 6-10 mm long, narrowly ellipsoid, green, glandular-pubescent. Flower unscented, 1-(5), 11-16 mm diameter, externally greenish-white, internally pale greenish-white, white, pale mauve or pinkish. Tepals externally sparsely glandular; dorsal sepal erect and incurved; lateral sepals porrect, remaining closely parallel, or with proximal margins overlapping or fused. Petals widely spreading or incurved. Dorsal sepal 6.0-8.0 × 1.5-2.0 mm, narrowly obovate, obtuse. Lateral sepals 6.0-8.0 × 2.0-2.5 mm, narrowly obovate, oblanceolate, asymmetric, subacute. Petals 6.0-8.0 × 2.0-2.5 mm, oblanceolate, falcate, subacute, apiculate. Labellum greenishwhite, white or pinkish with prominent dark red transverse bars articulated on a short 0.4 × 0.8 mm claw, trilobed; lamina ovate in outline when flattened, 5.0-6.0 × 4.5 mm, erect in proximal half, decurved in distal half, apex decurved or straight; lateral lobes 1.8 mm wide, erect and column-embracing, entire; mid-lobe 2.5 mm long, narrowly deltoid; cream to pale yellow, with 6-10 pairs of flat to linear marginal calli to 0.8 mm long, these decrescent and irregular towards apex, calli stipitate, pale yellow often with red stalks, in 2 rows extending onto the base of the mid-lobe; basal calli 4, darker than the rest; head oblong-ovoid, c. 0.5-0.7 mm diameter, papillate. Column 5.0-6.0 × 2.3 mm, green with dark red transverse bars, shallowly incurved, narrowly winged; central anterior ridge 0.8–1.0 mm wide. Anther c. 1.3–1.5 × 1.2–1.5 mm, green, papillate, with a short rostrum. Pollinia 4, 0.8–1.0 mm long, curved to flat, white or green, mealy, incoherent. **Stigma** semi-circular, 1 mm diameter sunken. Capsule erect, $10.0-12.0 \times 2.5-3.5$ mm long, ellipsoid to ovoid-ellipsoid, green often with purple stripes.

MANAAKI WHENUA ONLINE INTERACTIVE KEY

Key to native orchids of New Zealand

SIMILAR TAXA

See recognition sections for <u>Caladenia nothofageti</u> and <u>C. variegata</u>. <u>Caladenia chlorostyla</u> has been much confused with <u>C. minor</u> from which it is said to differ by the patent rather than stem clasping middle foliaceous bract of the flowering scape, mostly pink rather than greenish flowers, and by the clavate rather than capitate-globular lamina calli. <u>Caladenia minor</u> appears to be confined to the northern one-third of the North Island. However, it is a poorly understood species whose relationships to <u>C. chlorostyla</u> and <u>C. bartlettii</u> need critical evaluation.

FLOWERING

September-January (March)

FLOWER COLOURS

Green, White

FRUITING

December-April

PROPAGATION TECHNIQUE

Difficult—should not be removed from the wild.

WHERE TO BUY

Not commercially available

TAXONOMIC NOTES

Jones et al. (2001) revived the genus *Petalochilus* R.S.Rogers (erected by Rogers (1924) for what has come to be viewed as a peloric state of *Caladenia* R.Br.—see Moore & Edgar (1970)) for a distinct clade of mostly New Zealand orchids that had usually been referred to as *Caladenia*. Subsequently Hopper et al. (2004) showed how the reorganisation of *Caladenia* by Jones et al. (2001) was unworkable and they recommended a return to *Caladenia* and the other allied Australian genera that had been recognised previously. Following discussion with S. Hopper and P. Weston (pers. comm., 2011, 2014) the treatment of Hopper et al. (2004) is preferred to that of Jones et al. (2001) and so followed here.

ATTRIBUTION

Fact Sheet prepared for NZPCN by P.J. de Lange 14 April 2007. Description partially taken from Jones et al. (1997).

REFERENCES AND FURTHER READING

Hopper SD, Brown AP. 2004 Robert Brown's *Caladenia* revisited, including a revision of its sister genera *Cyanicula*, *Ericksonella* and *Pheladenia* (Caladeniinae: Orchidaceae). *Australian Systematic Botany* 17(2): 171–240. https://doi.org/10.1071/SB03002.

Jones DL, Clements MA, Sharma IK, Mackenzie AM. 2001. A New Classification of *Caladenia* R.Br. (Orchidaceae). *The Orchadian 13(9)*: 389–419. https://www.biodiversitylibrary.org/item/310770#page/1/mode/1up.

Jones DL, Molloy BPJ, Clements MA. 1997. Three new species and a new combination in *Caladenia* R.Br. (Orchidaceae) from New Zealand. *The Orchadian 12*: 221–229.

Moore LB, Edgar E. 1970. Flora of New Zealand, Volume II. Indigenous Tracheophyta: Monocotyledones except Gramineae. Government Printer, Wellington, NZ. 354 p.

Rogers RS. 1924. *Petalochilus*: a New Genus of New Zealand Orchids. *The Journal of Botany 62*: 65–67. https://archive.bsbi.org/Journal_of_Botany_1924.pdf

NZPCN FACT SHEET CITATION

Please cite as: de Lange, P.J. (Year at time of access): Caladenia chlorostyla Fact Sheet (content continuously updated). New Zealand Plant Conservation Network. https://www.nzpcn.org.nz/flora/species/caladenia-chlorostyla/ (Date website was queried)

MORE INFORMATION

https://www.nzpcn.org.nz/flora/species/caladenia-chlorostyla/